

**ABSTRACT OF THE DISCLOSURE**

A permanent magnet motor comprises a frame and a plurality of energizable coils mounted on the frame and are substantially equally spaced from one another. A starting coil is mounted on the frame. A wheel is rotatably mounted on the frame. Carried on the wheel are a plurality of permanent magnets, which are substantially equally spaced from one another. The axes of the energizable coils are disposed substantially at right angles to the axes of the permanent magnets. The permanent magnets cooperate with the energizable coils, so that upon energization of the starting coil, the wheel will begin to rotate in a first direction and upon energization of the energizable coils the wheel will continue to rotate in said first direction. The energizable coils are generally cylindrical and the outer surface of each permanent magnet has a recess complementary to the outer surface of the energizable coil so that the permanent magnet and pass closely to the energizable coil during rotation of the wheel. Control circuitry is provided for energizing the energizable coils.